# **BLACK BBD**

# THANK YOU FOR PURCHASING ERICA SYNTHS BLACK SERIES MODULE!

Erica Black Series include high-end, unique functionality and superior quality modules. Only the best, highest quality components are used, all inputs and outputs are protected against undesired overvoltage. When designing Black Series, put design and usability superior. Big knobs are assigned to functions that make difference in sound. Erica Black series consist of range of modules that are needed to put together entire synth. Enjoy!

The **Erica Synths Black BBD** is one of kind analogue delay module. It features two BBD lines: short, 1024 stage and long, 4096 stage, that work simultaneously and you can smoothly fade between those two, thus creating distinct multitap effect. Furthermore, an advanced BBD clock noise cancellation circuit is implemented that reduces unwanted BBD noise without filtering higher frequencies of audio signal. Most of parameters are voltage controlled, which allows to integrate the module in complex modular setups.

# **FEATURES:**

Full analogue design Two BBD lines (1024 and 4096 stages) Smooth crossfade between BBD lines Built in LFO CV control over Time, Feedback and Dry/Wet mix

# SPECS:

10Vptp
-5V - +5V
+95mA, -81mA
12HP
35mm

#### TIME

This is delay time manual control. Because of BBD clock suspension circuit, delay time can be pushed in extremely long regions, however in that case some high frequency artifacts may be heard due to sample rate reduction. The Time CV is added to the knob setting.

#### IN LEVEL

This is the input attenuator switch. Select among full amplitude, half amplitude and audio off.

#### **BBD MODE**

This control smoothly fades between short and long delays. Any setting in-between will result in distinct multitap delay effect.

#### LFO RATE

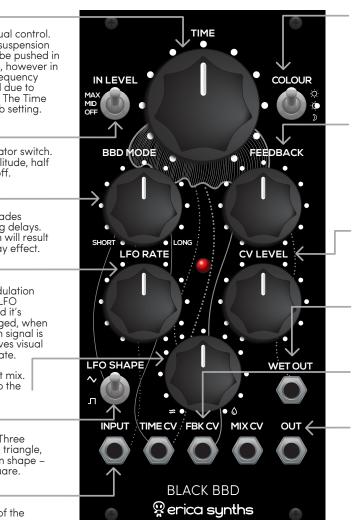
Adjust the internal modulation LFO rate. The internal LFO controls delay time, and it's automatically disengaged, when an external modulation signal is connected. The LED gives visual feedback on the LFO rate. This is manual Dry/Wet mix. The MIX CV is added to the knob setting.

#### LFO SHAPE

Select the LFO shape. Three shapes are available – triangle, square and in-between shape – mix of triangle and square.

#### INPUT

This is the audio input of the module.



#### COLOUR

Even though the module has BBD clock suspension circuit, the colour switch provides extra lowpass filtering of the signal. At top setting no filtering is applied, at lower settings increasing filtering is present.

#### FEEDBACK

This is the delay feedback manual control. In extreme clockwise settings the module goes into self-oscillation, and by adjusting delay time and BBD mode settings, the module becomes a drone machine. The FBK CV is added to the knob setting.

### CV LEVEL

This is the Time CV level attenuator. If nothing is patched into TIME CV socket, it controls the internal LFO amplitude.

#### WET OUT

This is the WET signal output of the module – use it for advanced patches.

#### TIME CV; FBK CV; MIX CV;

These are CV inputs for Time, Feedback and Dry/Wet mix.

#### OUT

This is the main output of the module.

# SAFETY INSTRUCTIONS

Please follow the instructions for use of the Erica Synths module below, 'cause only this will guarantee proper operation of the module and ensure warranty from Erica Synths.



Water is lethal for most of the electric devices, unless they are made waterproof. This Erica Synths module is NOT intended for use in a humid or wet environment. No liquids or other conducting substances must get into the module. Should this happen, the module should be disconnected from mains power immediately, dried, examined and cleaned by a qualified technician.



Do not expose the module to temperatures above  $+50^{\circ}$  C or below  $-20^{\circ}$  C. If you have transported module in extreme low temperatures, leave it in room temperature for an hour before plugging it in.



Transport the instrument carefully, never let it drop or fall over. Warranty does not apply to modules with visual damages.

The module has to be shipped in the original packaging only. Any module shipped to us for return, exchange and/or warranty repair has to be in its original packaging. All other deliveries will be rejected and returned to you. Make sure you keep the original packaging and technical documentation.

This device complies to the EU guidelines and is manufactured RoHS conforming without use of lead, mercury, cadmium and chrome. Nevertheless, this device is special waste and disposal in household waste is not recommended. User manual by Girts Ozolins@Erica Synths. Design by Ineta Briede@Black8.

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# You will find Erica Synths terms of warranty at www.ericasynths.lv

Items for return, exchange and/or warranty repair have to be registered at SUPPORT on www.ericasynths.lv and send back to us according to instructions in the support page.